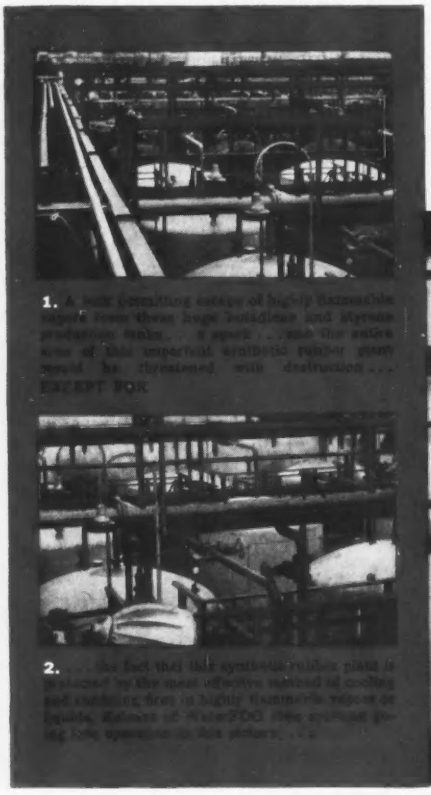
# Volunteer Firemen

SEPTEMBER 1944

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston 10, Massachusetts

## FIRE PREVENTION WEEK-OCT. 8-14

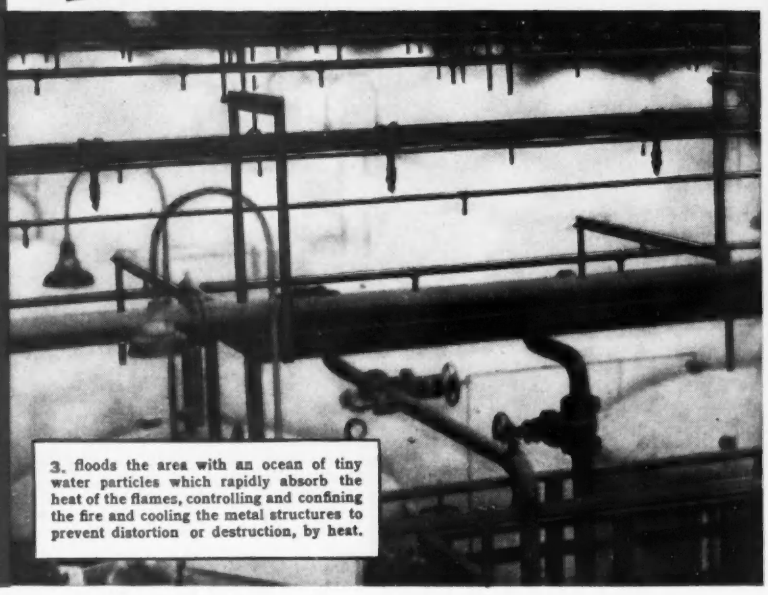
# WAR DEPENDS ON RUBBER—



1. A leak permitting escape of highly flammable vapors from these huge butadiene and styrene production tanks . . . a spark . . . and the entire area of this important synthetic rubber plant would be threatened with destruction . . . EXCEPT FOR

2. . . . the fact that this synthetic rubber plant is protected by the most effective method of cooling and confining fires in highly flammable vapors or liquids. Element of WaterFOG fire control giving full protection in this picture . . .

## SYNTHETIC RUBBER depends on . . . WaterFOG



3. floods the area with an ocean of tiny water particles which rapidly absorb the heat of the flames, controlling and confining the fire and cooling the metal structures to prevent distortion or destruction, by heat.

# Rockwood WaterFOG

## strips flammable vapors of their threat

At one of the country's largest synthetic rubber plants, five WaterFOG systems — part of a completely engineered Rockwood fire protection system — stand watch over 34 huge processing and storage tanks. The tanks they guard, measuring 18½ feet high by 8 to 10½ feet in diameter, contain butadiene and styrene . . . extremely vulnerable in case of fire.

The WaterFOG systems may be operated simultaneously, separately, or in any combination. A WaterFOG curtain between every other row of tanks, goes into action whenever the system on either side starts operating. Thus protection is provided over, around and under every tank.

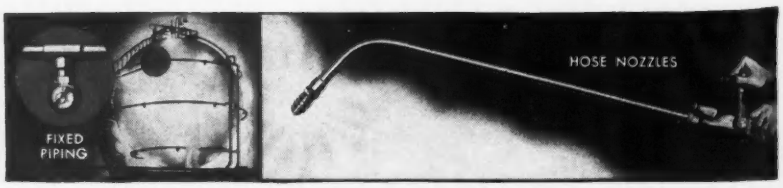
WaterFOG — created by impinging streams of water from Rockwood nozzles — is effective on flammable liquid or vapor fires where spray and solid streams are frequently unsafe. It absorbs heat faster, retards vaporization, doesn't splash. Both Underwriters' Laboratories and Associated Factory Mutuals approve Rockwood WaterFOG installations of fixed piping. WaterFOG nozzles for hose lines also available. Write for Bulletin 123.

**ROCKWOOD SPRINKLER COMPANY**
88 Harlow Street, Worcester 5, Mass.
*Specialists in Fire Protection Engineering, Equipment and Installation since 1907*

| TYPICAL WaterFOG APPLICATIONS | |
|---|---|
| quench and dip tanks | oil switches |
| paint shops | dryers |
| transformers | oil storage |
| | etc. |

*Water Engineered by Rockwood Cools, Confines, Smothers Oil Fires*

ROCKWOOD WaterFOG



# GAMEWELL FIRE ALARM SYSTEMS

## *Eliminate Delay - - - Reduce Fire Losses*

THE CONTROL UNIT VITAGUARD TYPE

This Unit contains all battery, operating, recording and testing equipment necessary for the operation of a system ranging from One to Forty alarm boxes. We supply complete directions for installing.

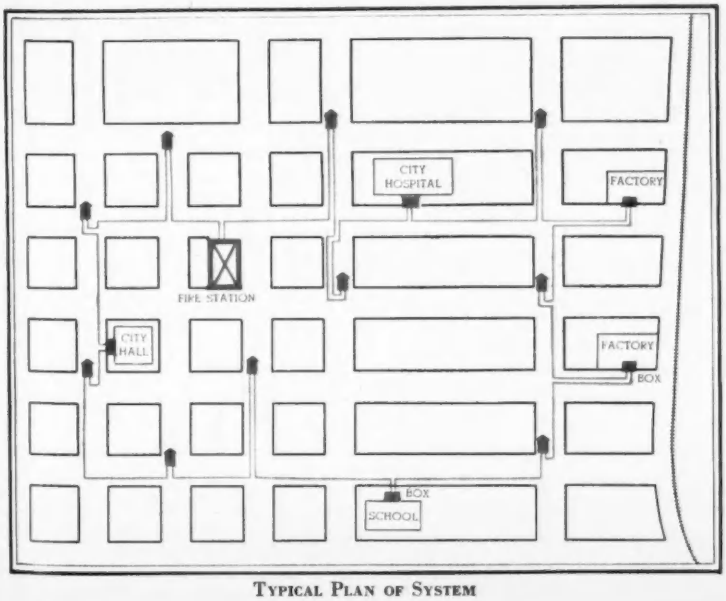
THE GAMEWELL SYSTEM for Volunteer Fire Departments provides the essential elements of accessibility, dependability and speed in giving alarms.

Public fire alarm boxes, quickly accessible, coupled with automatically responsive and coded public alarm equipment *eliminates delay by directing firemen to the scene of fire.*

*WE INVITE YOUR INQUIRY.*

GAMEWELL FIRE ALARM BOX VITAGUARD TYPE

With guard panel pulled forward exposing operating lever.




TYPICAL PLAN OF SYSTEM

DIAPHONE HORN

Operated by compressed air. Has great carrying power, distinctive tone and coding ability. A reserve supply of compressed air is automatically maintained.

NOTE: *Your own public alarm may be utilized and automatically operated by the Vitaguard System.*

THE GAMEWELL COMPANY

Newton Upper Falls Massachusetts

Cardox Fire Trucks are worthy running mates of the famous Cardox Airport Fire Truck. Self-contained . . . ready to roll at the first flash of fire . . . they go into action fast; knock out fires quickly with a tremendous mass discharge of cold, inert carbon dioxide *applied at the rate of hundreds of pounds per minute.*

Packing a wallop of 3 tons of liquid Cardox $CO_2$, Cardox Fire Trucks extinguish fires with a giant blanket of cold vapor and minus 110°F. $CO_2$ snow . . . *providing extinguishing coverage heretofore beyond the scope of mobile $CO_2$ equipment for industrial or municipal use.*

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Even relatively large fires are within the scope of the Cardox Fire Truck. Equally important, numerous smaller hazards, requiring proportionately smaller extinguishing applications, can be given uninterrupted protection with a single filling of Cardox $CO_2$. No highly specialized personnel is required. Any group of plant personnel can quickly become a highly efficient Cardox Fire Squad.

Write on company letterhead for Bulletin 2364.

★ ★ ★

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**CARDOX**
$CO_2$ FIRE EXTINGUISHING SYSTEMS

# Volunteer Firemen

Volume 11 Number 9

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THE VOLUNTEER FIREMAN

AS the conduct of the war swings more and more into the final offensive stages leading to Berlin and Tokio, there is growing interest as to the possible ultimate distribution of the some 14,000, 500-gallon pumping units distributed in so-called "target areas" by the U. S. Office of Civilian Defense.

It is too early to offer any definite suggestions as to possible ultimate distribution of these pumps but the information at hand indicates that the following factors must be considered if logical plans are to be made in advance for the final distribution of these pumping units, rather than merely allowing the Government's Surplus Property Officer to dump the units on the open market after their use for home defense has been terminated:

1. It is stated that the Army and Navy could use many thousands of these fire pumps as our forces advance. As pointed out by Capt. H. W. Backman in August issue of VOLUNTEER FIREMEN, the Germans have stripped the cities which they have abandoned of all means of fire protection. The Asiatic theatre of war alone is so tremendous in area that many pumping units could be utilized.

2. Some of the communities now having one or more of these OCD pumpers could use several pieces of this equipment as permanent auxiliary units to relieve more valuable pumpers of such work as pumping out basements, fighting dump fires, and for standby service. Where a city has gone to trouble and expense to mount the OCD equipment to make it serviceable, it should be allowed to retain the equipment at a nominal cost.

3. There is considerable interest in the possibility of utilizing a number of these units to furnish fire protection in rural communities not now having organized fire protection, or by placing them as reserve pumpers in existing volunteer fire departments so that the regular pumper could be sent outside the city limits on rural calls. However, it has been pointed out that the OCD pumpers were designed merely as wartime emergency units and do not have the reliability and long-life features customarily built into regular fire apparatus. Complete new outfitting with nozzles, hose, tools and other fire fighting appliances would be needed to make the pumpers serviceable. Shut-off nozzles with small tips would be needed for utilization of limited water supplies in fighting rural fires. Also none of the units have booster pump connections or booster tank and hose equipment. Most of the OCD pumps likely to be available consist either of a skid-mounted motor and pump assembly, or of a front-mounted pump. A motor chassis and fire hose body would have to be provided in either instance.

4. It is very obvious to persons familiar with this equipment that it can in no wise be considered as a substitute for the standard municipal fire apparatus meeting N.F.P.A. and National Board of Fire Underwriters specifications. If large numbers of these units are left, after the war, in the municipalities where they are now stationed there is considerable danger that economy-minded city officials not familiar with fire service requirements may delay purchase of replacements for fire equipment that is now obsolete. As the OCD equipment is of little service except in the auxiliary roles mentioned above, it may be in the best interest of the fire service to return any surplus equipment to the government for redistribution in areas of military operation.

ASSISTANT STATE FIRE MARSHAL E. L. SMITH of Washington reports a most unusual cause of fire which destroyed the Pacific Paperboard Box Factory at Longview.

It is seldom that a sweet tooth can be blamed for starting a fire, but this blaze occurred when employees returned to the plant one Sunday night to get honey from a bees' nest known to be in the walls of the building.

After breaking in, the men removed the battens covering openings between two plywood panels, pried open the panels, and found about a quart of honey.

The bees swarmed out, stinging the men so that they could not replace the panels. They went home for a blow torch and singed the bees. They replaced the bottom strips and removed more panels, turning the torch into the wall openings to kill the bees.

The fire smouldered in the walls until 2:07 A.M. when it blazed forth and destroyed the plant with a loss of $95,000.

FIRE LOSSES IN THE U. S. DURing July were estimated at $32,706,000, the highest for any July since 1932, according to figures of the National Board of Fire Underwriters. July losses were 31% higher than losses for July, 1943.

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# Hot Weather Fires

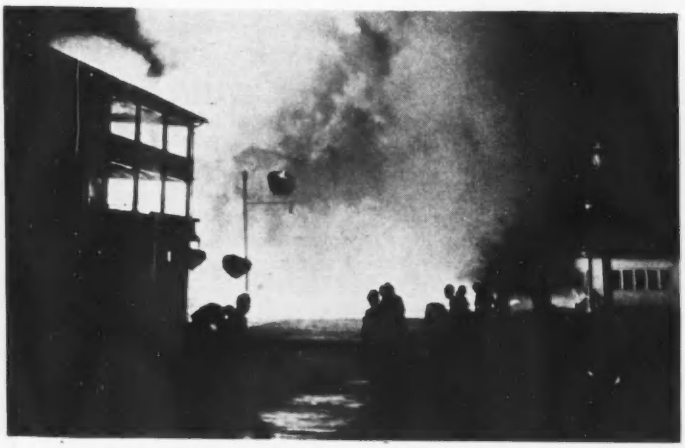
CLIFFSIDE PARK, N. J. Volunteer firemen take to the swimming pool to cool off as flames sweep the Casino at Palisades Park on August 12th. The fire occurred during the period of record-breaking heat that swept the eastern part of the United States. Fire loss was reported to be over $1,000,000.

AN exceptionally hot and dry summer has no doubt been the contributing factor in the unusual number of major fires occurring in the past two months. In the month of July alone, eighteen fires caused losses estimated at over $250,000 each. The records for August may equal these figures which break all records for large fires during the previous summer.

In the eastern states, the hot weather has been combined with a marked decrease in rainfall. Exposed wooden surfaces of buildings such as amusement parks, pier sheds and other similar structures have been subject to ignition from any chance spark or flame. The Hartford circus fire tragedy was an example of this.

There can be little doubt that lack of man power for routine cleanup work has been responsible for deterioration of maintenance standards in many properties. Fire departments, also suffering from lack of man power, have difficulty in keeping their usual peak of efficiency.

CLEVELAND, OHIO. Nine million pounds of magnesium made this spectacular fire at the National Smelting Company plant on July 29th.



WILDWOOD, N. J. Volunteers can be seen battling second large boardwalk fire in 8 months. $250,000 damage was suffered early on the morning of August 12th. (See VOLUNTEER FIREMEN, Feb. 1944).

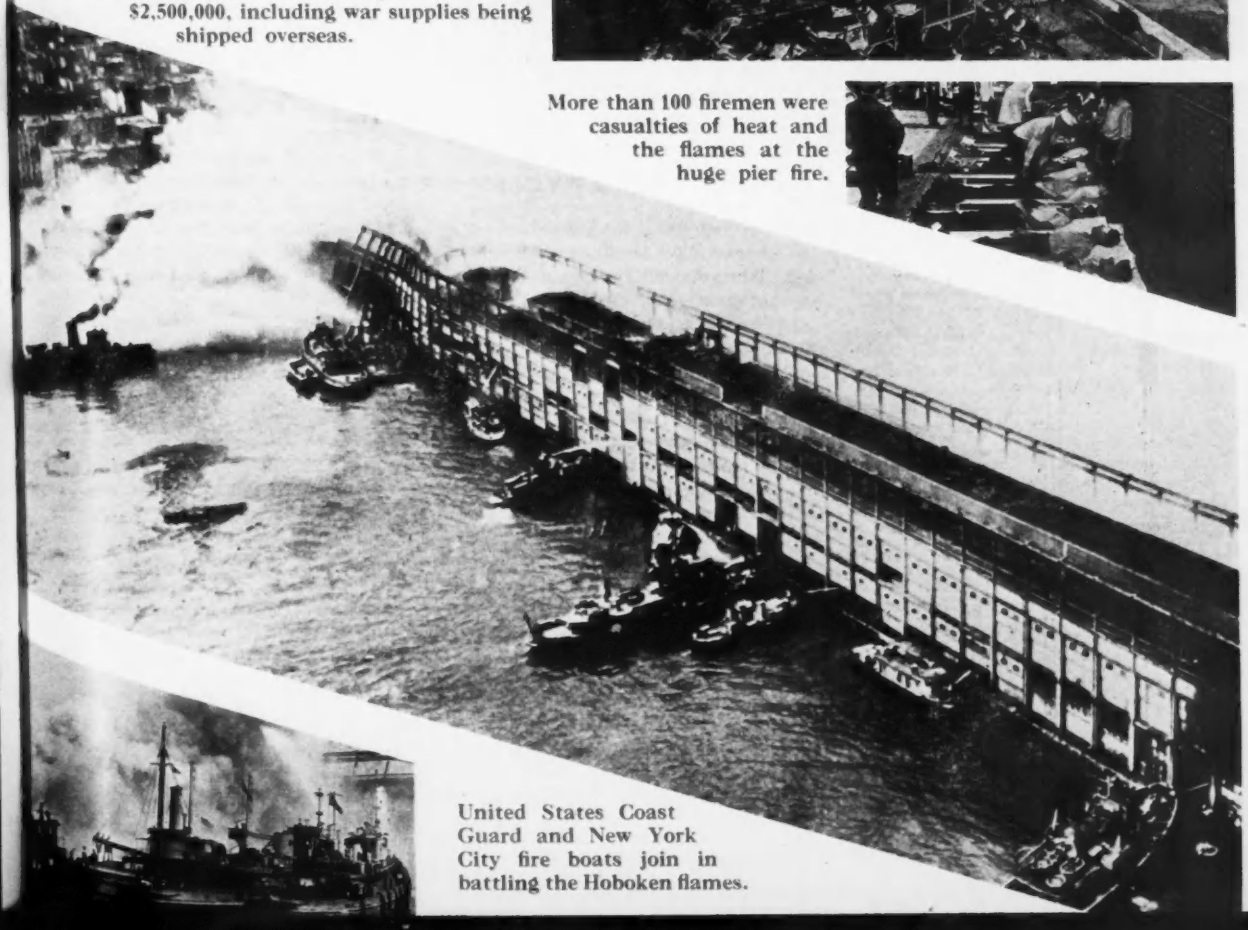
CONEY ISLAND, N. Y. Famous Luna Park amusement center was destroyed in a fire-alarm fire on August 12th. More than 7,000 persons in the Park fled the flames without serious casualties. The fire loss may reach $500,000.

AKRON, OHIO. Scrap rubber storage depot covering 25 acres, and four buildings of this rubber reclaiming and tire manufacturing plant were destroyed with a loss of $350,000 on August 3rd. This closely piled rubber storage violated both Akron city ordnances and U. S. Rubber Reserve Corp. regulations.

HOBOKEN, N. J. One of America's greatest harbor disasters of the war destroyed Pier Four on August 11th-12th. Explosions spread the blaze which caused damage estimated at $2,500,000, including war supplies being shipped overseas.



More than 100 firemen were casualties of heat and the flames at the huge pier fire.





United States Coast Guard and New York City fire boats join in battling the Hoboken flames.

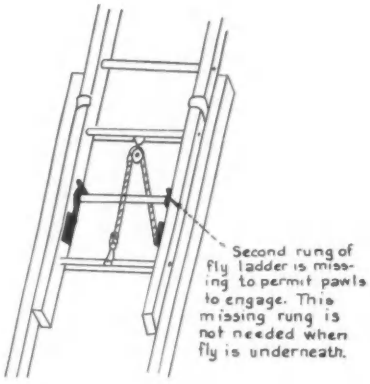
# Why Place Fire Ladders with Fly Underneath?

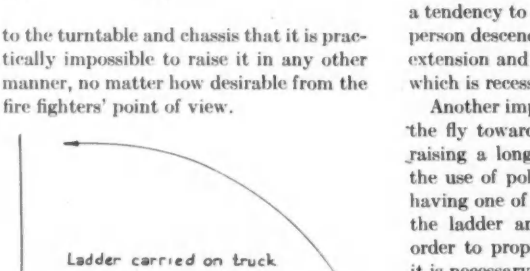
ONE of the questions we are asked most frequently by firemen is why the various training texts published by the National Fire Protection Association always show the fly section of an extension ladder placed toward the building rather than away from the building.

The answer is that it is because this method has been recommended by vote of the Fire Department Instructors' Conference. During the earlier years of the FDIC gatherings various drill evolutions were given a careful scrutiny at the drill tower. One result was that drillmasters present voted to recommend that the fly of an extension ladder be placed underneath or toward the building.

It has been pointed out frequently by experienced fire fighters that any ladder that cannot be inclined in either position in an emergency does not belong in the fire service. Nevertheless, in the interests of both safety and efficiency, it is contended that the fly should be placed underneath. Some of the reasons given for this are illustrated on these pages. Firemen who take out their ladders and make a study of this matter, listing advantages and disadvantages of the different methods, are likely to find other reasons.

The fact that an aerial ladder is raised with the fly away from the building is said by competent engineers to have nothing to do with the case. The aerial is so secured to the turntable and chassis that it is practically impossible to raise it in any other manner, no matter how desirable from the fire fighters' point of view.





Ladder carried on truck with fly on top brought to point of operation with butt forward- does not have to be turned over to be raised with fly toward wall.
Wall
Butt of ladder

LADDER LAID WITH FLY ON TOP FOR RAISE

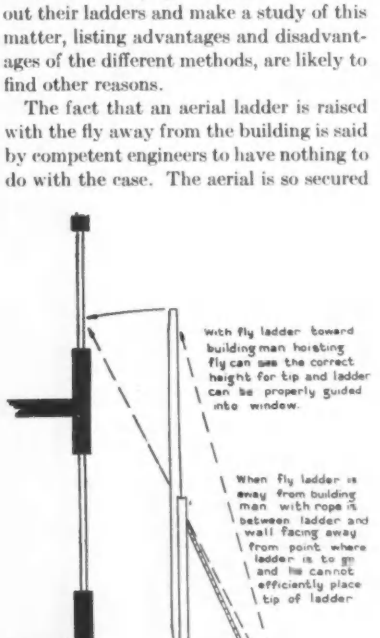
Ladders carried in the bed or banks of a ladder truck have the fly or extension on top. When they are brought to the point of operation — butt first — they are in position for raising with the fly underneath or against the building when in climbing position. Of course, with a short extension ladder that may be carried on the shoulder it does not make much difference for convenience in raising, which side is against the building, but it does make considerable difference with the longer extension ladders, particularly those with poles.

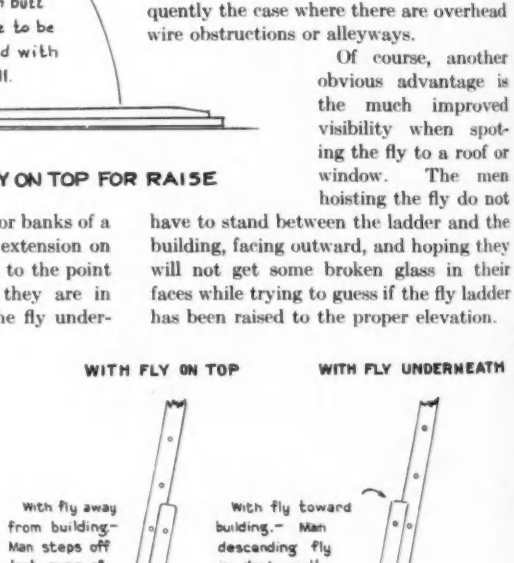
Ladder operations should always be thought of in relation to speed and safety in rescue and fire fighting operations. The method selected should be the one most desirable when carrying or assisting a person down a ladder, who is not used to climbing, who is afraid of falling and subject to hysteria.

When the fly is on top in the old-fashioned way, used prior to modern drill schools, a person coming down the ladder has a lot of pitfalls that can cause a misstep. For example, when the fly is on top or on the side away from the building, it is very easy to slip when the point is reached where the rung of the fly ladder is generally omitted to permit the pawls to engage and hold the fly in place. Equally serious is the fact that when the fly is on top there is a tendency to step off into space when the person descending comes to the end of the extension and must get on the bed ladder which is recessed behind the fly.

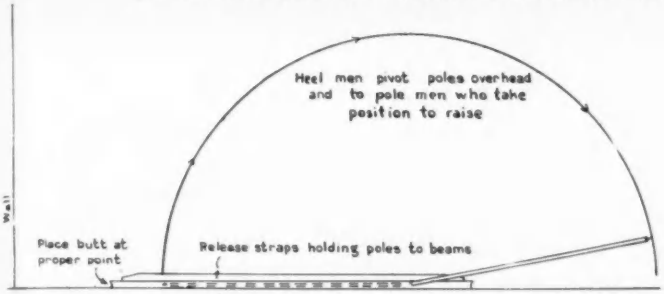
Another important advantage in having the fly toward the building is that when raising a long extension ladder requiring the use of poles it eliminates the need of having one of the pole men pivot between the ladder and the burning building in order to properly set the poles whenever it is necessary to raise the ladder on a line parallel with the building wall as is frequently the case where there are overhead wire obstructions or alleyways.

Of course, another obvious advantage is the much improved visibility when spotting the fly to a roof or window. The men hoisting the fly do not have to stand between the ladder and the building, facing outward, and hoping they will not get some broken glass in their faces while trying to guess if the fly ladder has been raised to the proper elevation.

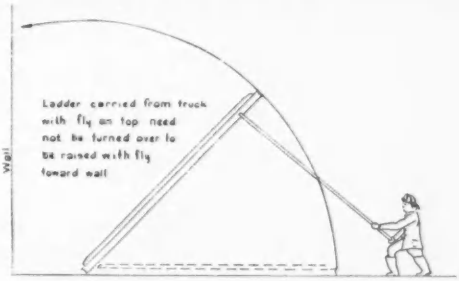

With fly ladder toward building man hoisting fly can see the correct height for tip and ladder can be properly guided into window.
When fly ladder is away from building man with rope is between ladder and wall facing away from point where ladder is to go and has cannot efficiently place tip of ladder


WITH FLY ON TOP
WITH FLY UNDERNEATH
With fly away from building.- Man steps off last rung of fly into space without warning.
With fly toward building.- Man descending fly in dark will automatically place foot on top of bed ladder.

## PLACING POLES IN POSITION TO RAISE WITH FLY LADDER TO BUILDING


Heel men pivot poles overhead and to pole men who take position to raise
Wall
Place butt at proper point
Release straps holding poles to beams

**Ladder with fly on top as carried on truck and with poles carried along outside beams of bed ladder. Poles are pivoted back to raising position and ladder raised without the inconvenience of turning over heavy ladder to place fly underneath.**




**Raised with fly on top, pivoting ladder requires one poleman to cross *between* ladder and fly. There are frequent obstructions; such as basement wells.**

# ELECTRICAL INSPECTIONS

ELECTRICAL fires led the list of fire causes with $28,000,000 damage in 1942, the latest year for which figures are available. According to N.F.P.A. fire loss records electrical fires were numerically second only to those started by smoking.

With electricity playing such a major role as a fire cause, it is imperative that all firemen have an elementary understanding of this important power source which, when properly used, is essential to modern civilization, but when misused is a fire hazard and cause of electrical injuries.

The N.F.P.A. has been for many years the sponsor of the National Electrical Code which has been used throughout the country as a guide for the safe use of electricity. It is not expected that firemen will be familiar with the many complicated details involved in the safe wiring practices set forth in the Code, but it is desirable for them to know something about the way electrical energy may get out of hand and cause fires. The "Arkansas Firemen," for July, a bulletin published by the Arkansas Fire Prevention Bureau, contained a helpful digest of what firemen should know in order to size up ordinary electrical installations and determine their relative fire hazard. Information presented in this Bulletin is substantially that given below:

IF firemen were to be capable of entering a building and making a completely adequate inspection for electrical fire hazards, they would have to be electricians. This will, of course, be out of the question. However, by previous study the inspector should be able, at a glance, to size up an electrical situation and deal with it safely or call those who are equipped to do so.

This article will not attempt to make electrical inspectors "in one easy lesson" but rather give some general information that will be helpful in understanding how electricity can be a fire hazard.

Electrical current can cause fires by (1) arcing, (2) sparking, and (3) overheating.

When an electrical circuit is interrupted, as by a switch, or accidentally, as where a contact at a connection or terminal becomes loosened, an arc is produced. The temperature of the arc is high, and may ignite combustible material.

The arc also may fuse the metal of the conductor or ignite the insulating material so that hot sparks and globules of hot metal may be thrown about, and set fire to combustible materials.

Electrical wiring is made to carry specific loads of current. When carrying current it produces heat. When controlled, this heat serves a very useful purpose in heaters, irons, and other appliances. However, when the heat is beyond the limit that the conductor was intended to carry, the current becomes a hazard (1) through the deterioration of the insulation covering the conductor, and (2) through transfer of the heat generated to a combustible material.

Both fuses and circuit breakers are protective devices against the overheating of conductors. The fuse, which is the most common overcurrent protection, consists of a fusible metal element which, when heated to a certain temperature, melts and opens the circuit interrupting the flow of current. The circuit breaker consists of mechanical means of opening or switching the circuit.

When because of a short circuit or for some other reason, a circuit becomes overheated, introducing the danger of fire, these devices act like valves to cut off the flow of current until the difficulty is corrected. For this reason, fuses should never be bridged by using pennies or other current jumpers in the fuse socket or by bypassing the fuse box.

When the two copper conductors in a flexible cord come together, forming a short circuit, or when a live conductor comes in contact with a grounded object, arcs are produced. Short circuits are usually produced by (a) insulation failure, (b) mechanical interference, or (c) deterioration due to poor construction, age and use. For these reasons, flexible cords should be treated with respect. When worn or frayed, they should be replaced. They should not be hung over metal objects. And they should not be used as a substitute for permanent wiring.

Briefly stated, two essential factors in the distribution and use of electricity must be obtained and maintained to assure safety from fire and accident. They are conduction and insulation. Conductors must be of the proper material and of sufficient size to carry the desired amount of electrical current without overheating. When in doubt consult the "National Electrical Code" and professional electricians.

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# Our Readers Say—

THE following is from a letter received by the Belpre Volunteer Fire Department from the Captain in charge of one of the U. S. Naval Hospitals, and concerns the performance of duty of Herbert Spencer, Pharmacist Mate, 3/c, a member of the Belpre Volunteer Fire Department, on the night of May 10, when a bad fire occurred at the hospital:

"Spencer at the time was in charge of the fire fighting force and his efficient conduct and admirable leadership has been recorded in his official service record. The inspectors, following the fire, have been praiseful in their comments on the work of the fire fighting force, voicing the opinion that limiting the fire to one wing of a large ward was due in a large measure to the excellent work of the fire fighting force. It has also been observed by government inspectors that the control of the fire could not have been better handled by the most highly trained and skilled city fire departments.

"At general formation as Commanding Officer of this hospital I publicly commended Spencer and his associates who were on duty as fire fighters the night of the fire. Spencer is a very outstanding young man and we are happy and proud to have him as a member of the U. S. Navy."

This member has been on the local department for several years. He received his training here and at Parkersburg, W. Va., under Chief Lloyd Layman, now Commander of the U. S. Coast Guards, Fort McHenry Training Station, Baltimore, Md.

D. M. BROOKHART, Sec'y.-Treas.
Belpre Volunteer Fire Department
Belpre, Ohio

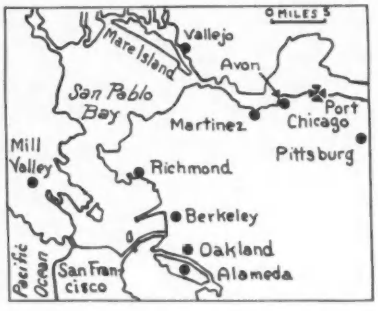
## "Mutual Aid Functions 100 Per Cent"

# at PORT CHICAGO BLAST

A CLOSELY-KNIT mutual aid plan is in operation between the nine counties bordering San Francisco Bay in California. Known as Region Number 3 under the Mutual Aid provisions of the California State War Council, the Plan provides each county with a fire co-ordinator and an over-all regional co-ordinator.

At the time of the Port Chicago munitions explosion of July 18th, which killed over 350 persons, the mutual aid plan functioned with "100 per cent efficiency," enabling the communities of Berkeley, Alameda, San Francisco, Mare Island, and others in or near the danger zone to maintain complete co-ordination of relief activities.

Fire Chief Clarence Viera, of Martinez, California, writes of the events that took place the night of the explosion (10:20 P.M.).




"Having an Army Arsenal and several oil refineries within a few miles of our city, it was somewhat difficult to determine the exact location of the explosion. However, it being evident that it was within a very few miles, a general alarm was sounded in anticipation of any emergency that might follow.

"By 11 P.M. we received a call from the Naval Base asking for portable lights, as the Base was in complete darkness. Several fire units with portable generators were sent to the scene of the blast, coming from Martinez; Associated Oil Company, Avon; Berkeley Fire Department; and Camp Stoneham, Pittsburg. These generator units being used for lighting to administer first aid by doctors and nurses.

"There were several box cars stored in one of the revetements (see illustration). Shortly after the arrival of our fire truck, two box cars, containing goods of undetermined nature, broke into smoke. This was caused by red hot metal coming from the exploded ship and going through the top of the box car, making a hole approximately 12 inches square. Immediately our engine was connected to the hydrant with a 2½-inch line pumping for several hours. Two Army trucks were also used.

"At 2 A.M. a call came from the Acting Commander of Mare Island, asking if water could be sent out to the Naval Base for drinking purposes. I immediately sent a State Forestry truck from our station which holds 375 gallons of water and also called for a 500-gallon tank truck from Camp Stoneham.

"Due to the fact that the Naval Base kept up good housekeeping, such as clearing away grass, etc., and the fact that the electrical protection functioned properly, there were a minimum of fires started from this explosion."

*International*

**In the terrific blast which shook the San Francisco Bay area when two ships, being loaded with ammunition, exploded, hundreds of lives were lost. In the area about the port, near Martinez, California, widespread damage was caused. These steel box cars near the scene with the top and sides crushed in are mute testimony of the intense forces caused by the explosion.**

## SAN MATEO CHIEF DESCRIBES ANOTHER MUTUAL AID PLAN

FIRE CHIEF HUGH F. MORRIS, of San Mateo, California, reports on the mutual aid arrangements of the three cities of San Mateo, Burlingame, and Hillsborough in California.

"October 21, 1941, the three cities . . . executive committee of the civilian defense agreement instructed the fire committee to prepare a plan of operation . . . to co-ordinate the activities of the fire departments. The committee realized it was necessary to establish a central fire alarm office in order to combine and utilize all fire fighting forces of the three departments, consisting of 8 engines, 3 trucks, 4 tank wagons, one high pressure wagon, a total of 46 full-time men and 3 chief officers. This plan was submitted to the executive committee and approved and officially put in service May 2, 1942.

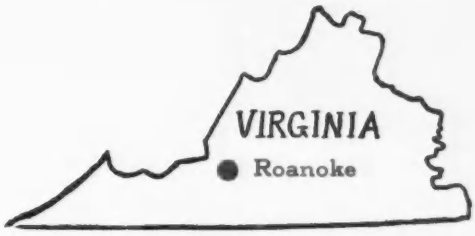
"For some time prior to 'December 7th' the City of San Mateo operated the central fire alarm office in the headquarters building at the Civic Center, having a trained personnel of women fire alarm operators. This service was merely extended as a fire alarm office to the City of Burlingame and Town of Hillsborough.

"Plans and specifications are now being prepared for the construction of a three cities training tower and drill yard. It is our plan to have one drill master for the three departments and one drill manual, which will bring about uniform training and operational procedure. The chief officer of the city in which the fire occurs is the commanding officer of the fire. Our departments administratively operate independently.

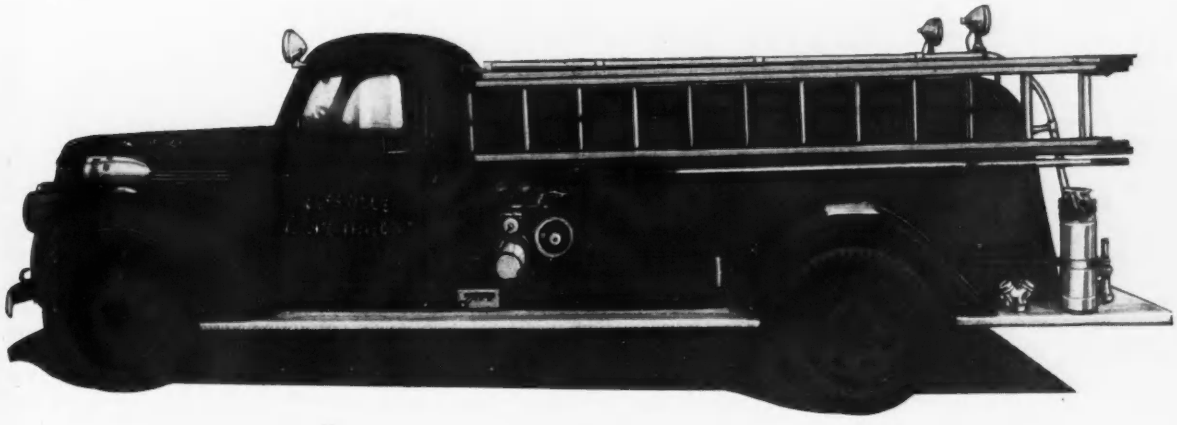
"Chief officers' cars have two-way radios operating through KSPH, the official broadcasting station for the Town of Hillsborough. Apparatus is now being equipped with receivers and some transmitters."

**Beyond the debris of giant piles and wrecked automobiles on the pier at Port Chicago can be seen the hull of one of the exploded munitions ships.** *International*

# OREN




*"The South's Only Fire Truck Manufacturer"*



***Triple Combination Pumper Built for Keysville, Virginia consisting of 500 G.P.M. Hale Centrifugal Single Stage Pump and 200 Gallon Booster Tank***

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## Every **OREN** is Specially Built and Designed to Meet The Individual Needs of the Community

★ **OREN** builds a complete line of FIRE TRUCKS. Write for information. ★

**OREN FIRE APPARATUS COMPANY**
1010 WEST SALEM AVENUE
ROANOKE, VIRGINIA

# SPRINKLERS
## A Fire-Department Tool

by J. B. Coleman

**John B. Coleman is Chief Engineer of the Grinnell Company of Providence, R. I. This article is from a talk Mr. Coleman gave to the New York State Fire Chiefs' Association in Utica, N. Y., on May 22, 1944.**

AS firemen, if no automatic sprinkler system had ever been invented, you would have invented a system. You would have realized that if a piping system could be extended throughout a building, if you could pump water into the piping system and provide valves that would automatically open under fire conditions, you would be able to deliver the water immediately over the fire. It would be far more effective than leading a hose stream into the building with all the attendant hazards. Having gone that far to devise such a system, you would carry it farther and connect to the city mains. You would provide means by which water would always be on hand and the fire itself would ring an alarm to bring you there with apparatus to supplement the system.

That is the prime function of an automatic sprinkler system: To provide the means for firemen to deliver water over a fire in such quantities that the fire will be held in check and finally extinguished; and that it will be safe for the men to go in with a hose. Therefore you have a right to consider sprinklers as your aids in the business of fighting fires.

Two fires showing the value of sprinklers as a fire department tool stand out in my personal experience.

About twenty-five years ago, a fire occurred in the Peter Van Skyck Drug Company on Lake Street, Chicago. The building had been equipped with an automatic sprinkler system, although it was one of the very earliest and considered obsolete. The sources of supply for this system were a small pressure tank, a 10,000-gallon gravity tank, and a fire department connection.

A large consignment of sulphur had been delivered to the drug company and stored in the basement. One day, for some reason, it took fire. The firemen tried to use hose streams directly on the fire until the fumes drove them away. They next connected to the sprinkler connection.

In a short while it was observed that the gravity tank on the roof of the building was empty. More water was being delivered through the sprinkler system than was being supplied by the pumper. It was suggested to the chief in charge that he run two or three additional hose streams up to the roof to keep the gravity tank full. This was done and the fire was put out with very little damage. The second day after the fire, the Peter Van Skyck Company was operating as if nothing had happened. This is one example of using the sprinkler system in its true function as a tool of the fire department.

The same thing happened to the Mineapolis Drug Company, Minnesota. In this case, a barrel was opened containing some chemical which was not believed to be explosive. The barrel was an old whiskey barrel and the inside was charred. It developed that when this chemical was mixed with charcoal a very explosive substance resulted. The man opening it struck a nail in some way and caused a spark. An explosion occurred and immediately all the sprinklers on the third floor of that building opened.

There was a fire station across the street. They dashed out and connected the pumper to immediately pump into the sprinkler system. There was another fire department connection around the corner and a second fire company connected to that. In twenty minutes at the most, the fire was out. This is another example of using a fire department tool properly.

YOU have an interest in automatic sprinkler systems as a tool in case of fire, and in seeing in your periodic inspections of the properties that these sprinkler systems are in working condition.

The fact that the unsprinklered, non-fireproof building is responsible for the large fires in which you risk your lives was emphasized by a report made years ago by the Chicago High Pressure Commission. During the period studied they found that they had had 158 large "special call" fires in the non-fireproof, unsprinklered buildings with an average loss of $48,600 per fire. In the fireproof, unsprinklered buildings they had 3 bad fires with an average loss per fire of $41,600. There was only 1 important one in the sprinklered buildings with a loss of only $8,760.

A sprinkler system will not frighten a fire out. It must be in good working order and capable of being used immediately. The sprinkler system is a valuable tool for you to use. You can do the most to protect the property under your care by learning all about this tool, how it works, and how it can be kept in service for your use.

Sprinkler systems in themselves are not very elaborate mechanisms. A sprinkler system may be put in and may not be needed for years, but if it is called upon at the end of twenty years, it is expected to work. Therefore the valves, the apparatus and all of that sort of thing must be simple.

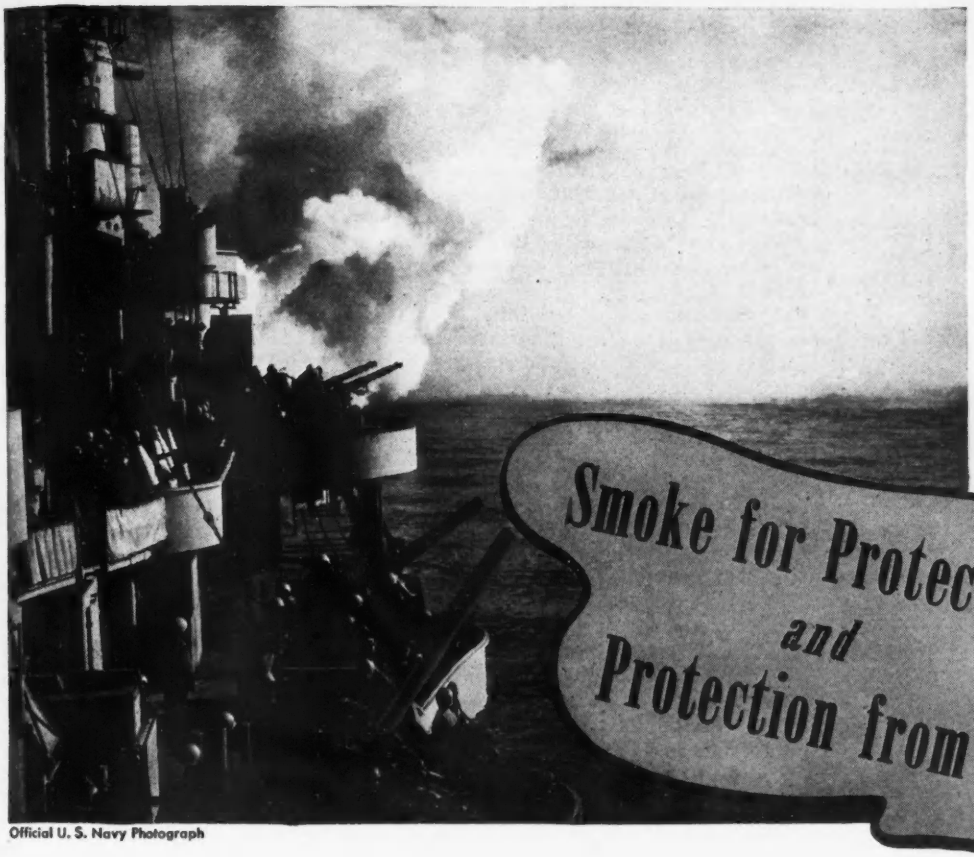
THERE are several types of automatic sprinkler protection:

(1) The ordinary wet pipe sprinkler system used in those places where there is no danger of freezing.

(2) The dry pipe automatic sprinkler system, and as its name indicates, it is a system in which water is not allowed into the piping until a fire occurs. Then water is allowed in automatically by the tripping of a special type of differential check valve.

(3) The third is the pre-action system. In this case, the fire is detected by some means outside the sprinkler system proper, such as thermostatic controls. Water is allowed into the piping at that time so that when the sprinkler opens the water will be there. At other times the water is held out of the piping, again by a special type of check valve. This system operates primarily on the rate of rise of temperature. It has certain advantages in certain definite types of property. A functional modification of this system is the deluge system and is used in placed where there is danger of a flash fire.

I know of no better way for you to learn all about this tool than by making an inspection of the properties in which sprinkler systems are installed, finding out where the control valves are and how the individual systems operate. Speaking for my own company, I am quite certain that our foremen in any town in which they are working will be glad to give you this information about any system they are installing.



Official U. S. Navy Photograph

# Smoke for Protection and Protection from Smoke

HERE the USS Philadelphia is shown weaving a veil of smoke to protect ships anchored in a beachhead bay.

The USS Philadelphia and all Navy combat ships are adequately equipped to eliminate smoke by extinguishing fire should it start on shipboard. With the appearance of the first curl of smoke or tongue of flame, the fire fighting equipment is available for instant use. This efficient U. S. Navy fire protection is saving many lives and valuable ships in the daily naval encounters of this World War.

The U. S. Navy has adopted National Foams and is using them extensively, especially to combat oil and other particularly hazardous fires on land and sea. National Foams are used by most oil refineries and by other important industries.

Our engineers will gladly consult with you and advise regarding type of equipment which will most effectively meet your needs.

## IN FIRE DEPARTMENT SERVICE

National Foam System has equipment especially designed for the use of Fire Departments to meet all types of fire fighting requirements. Complete engineering service available.

The experience of our engineering department is at your service.

BACK THE ATTACK — BUY WAR BONDS

## NATIONAL FOAM SYSTEM, INC.

Specializing in Foam Fire Protection

Packard Building, Philadelphia 2, Pa.

# Fire Prevention Week Program

LAST year almost 10,000 persons lost their lives in fires. The nation suffered a property damage loss of over $1,000,000 a day. Somewhere in the United States a dwelling fire occurs every minute and a half. More than once an hour some person is burned to death.

This tragic loss must be prevented! We cannot afford to go on losing 10,000 citizens. Enough houses catch fire each year to shelter the city of Los Angeles. In only one way can we stop it — by appealing to the individual citizen.

Carelessness in the way we keep house; in the way we dispose of rubbish; in the way we smoke; in the way we mistreat electrical and heating equipment is the reason, four times out of five, for fires in our homes and places of employment. Fire Prevention Week offers the fire department an opportunity to enlist the public in the war against fire, not just from October 8 to 14, but throughout the year.

Since the publication of the "Suggested Program for the Observation of Fire Prevention Day" by the N.F.P.A. in 1913, there has been a tremendous popular awakening to the significance of fire waste. This is shown by a marked decrease in fire losses as compared with the values at stake. Fire Prevention Week is annually designated by Presidential Proclamation as the week including October 9th, the anniversary of the great Chicago fire of 1871.

Illustrated at the left is a day-by-day schedule for Fire Prevention Week. The program outlines a week's activities toward spreading the message of fire prevention. From the Sunday sermon to a final check on the community's effort at a Saturday town meeting, every man, woman, and child is reached.

At the lower left is a "Safety at Home" reminder originated by the Basin, Wyoming, Fire Department. This 6 by 9 card is displayed for all to see in every occupied building in town. The Basin Fire Department reports that such publicity for fire prevention pays well.

The certificate below is an example of the Hempstead, New York, Fire Department's work in teaching fire prevention to the school children. Instruction periods in the schools consisted of "a lecture and demonstration in fire prevention and extinguishment, and also the proper manner to call in an alarm of fire or to use a fire alarm box. Those children that received this instruction were then enrolled in a 'Junior Fire Prevention Bureau' and received a certificate."

●

In planning a fire prevention campaign to reach the entire community there is no better way than to have a program in the local movie theatre. A new "short" has been produced by Underwriters' Laboratories as their contribution to the Fire Prevention Week program. The film made available this year is "Magic & Fire," a movie version of a slight of hand show by Claude Bawden that has taught fire safety to thousands. The cost of the film is $4.90: 5% discount for orders of three or more films. The cost includes a final sequence in which the name of the local fire prevention committee can appear. Theatre managers should be urged to run the film at every movie showing. Address: Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago 11, Ill.

## SAFETY *at* HOME!

SOME TIME every soon clean the yard and get ready for that Victory Garden. At this point the Basin Fire Department respectfully suggests that you have your garden hose or a pail of water ready in case the wind spreads the fire.

ALL RUBBISH FIRES are perfectly harmless until they get out of control; then they are extremely dangerous, both to your own property and your neighbors'.

FIRST be absolutely sure that you are going to complete the job before you start, and second be sure the job is completed and all fire is out before you leave it.

EVERY SMALL CHILD is attracted by a fire, large or small, and great care should be exercised in allowing children to play with or near a fire.

TAKE REASONABLE PRECAUTION against spreading of fires and be careful of burning embers being carried by the wind into adjoining property. Be a *good* neighbor!

YOU WOULD FEEL BADLY if you thought you were the cause of a severe property loss to yourself or neighbors. *Think it over!*

•

ALL HOMES and other buildings that are connected with electric power circuits are protected from "shorts," which are responsible for most of the electrical fires, by a fuse which "blows" at once to prevent fire. See that your building is not over fused.

TALK FIRE PREVENTION to your neighbor and in this way we may all be more fire conscious.

•

HAVE YOU CHECKED the accumulation of wastepaper in the attic and in the basement. To be sure that old dry paper is not lying on your electric wires or against chimneys.

OUR DUTY, at this time, is to prevent waste, and any fire that causes damage to our homes or business places is an absolute waste.

MODERN EQUIPMENT makes fire fighting more effective, and Basin has good equipment, but fire prevention is much easier and safer.

EVERY TAXPAPER and resident of Basin, by being careful, can assist in lowering the fire loss. *Let us do it!*

*Respectfully submitted,*
BASIN FIRE DEPARTMENT

1943 **This is to Certify that** 1944

Has agreed to carry out the following rules and regulations, and by so doing hereby becomes an active member of the

**Junior Fire Prevention Bureau**
of the
**Hempstead Fire Department**

1. I will never tamper with or use a fire alarm box for other than to sound an alarm for an actual fire.
2. I will never carry or play with matches.
3. I will never play with fire, or be the cause of starting or spreading a fire.
4. I will report all fires to the proper authorities, and do every thing consistent with my own safety to extinguish a fire.
5. I will practice and instruct my friends in all Fire Prevention Measures of which I am aware.
6. I will learn and remember the number of the Fire Alarm box nearest my home.

BUREAU OF FIRE PREVENTION, H.F.D.
WILBUR E. SEAMAN, *Fire Marshal*
PERCY C. SMITH, *Chief*
RAYMOND KINSEY, 1st Ass't *Chief* CHARLES STEVENS, 2nd Ass't *Chief*
PETER MAGEE, *Building Inspector*

# FIRE PREVENTION WEEK
## OCTOBER 8-14
# PROMOTION

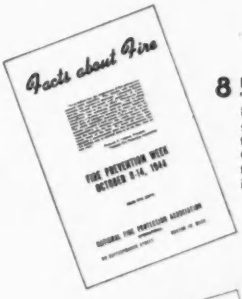
**1** **Town Plaster** — Red, White, and Blue. 3¼ x 12. For pasting on store windows, billboards, vehicles, etc.

**7** **Picture Book** — Red and Black. 16 pages of outline drawings of fire hazards, for coloring by children.

**2** **Community Poster** — Red and Black, 12 x 16

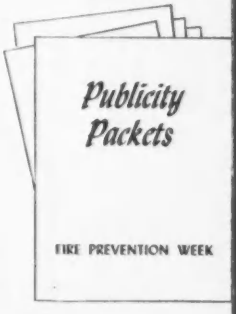
**3** **Farm Poster** — Red and Black, 12 x 16

**5** **Fire Prevention Week Handbook** — Complete plans for a successful campaign.




**8** **Pamphlet** — "Facts About Fire." Discussions and statistics on fire. Of great value tospeakers, editors, writers.

**9** **Publicity Packets** — Step - by - step packets of instructions on Fire Prevention Week. Contains news stories, radio scripts, etc.




Flyer — Red and Black 5½ x 8½. A colorful envelope stuffer.

**6** **Quiz** — Red and Black. A four-page fire quiz, illustrated, with correct answers.

**10** **Folders** — In several colors. Each is 6¼ x 3¼. For including in letters, home distribution, etc.

## PRICE LIST

1. Town plaster — $.50 per 100, $4.00 per 1000.
2. Community poster — $2 per 100, $15 per 1000.
3. Farm poster — $2 per 100, $15 per 1000.
4. Flyer — $.60 per 100, $4.50 per 1000.
5. Handbook — $.15 per copy, $12.50 per 100.
6. Quiz — $1 per 1000, $8.50 per 1000.
7. Picture Book — $.05 per copy, $4 per 100, $35 per 1000.
8. Pamphlet — $.05 per copy, $4.00 per 100.
9. Publicity Packets — (a) for Fire Chiefs; (b) for Farm Groups. $1.00 each, single sets free to campaign sponsors.
10(a). Folder — $1.50 per 100, $10.00 per 1000.
10(b). Folder — $1.50 per 100, $7.00 per 1000.
10(c). Folder — $1.50 per 100, $8.50 per 1000.
10(d). Folder — $1.50 per 100, $10.00 per 1000.
10(e). Folder — $1.50 per 100, $10.00 per 1000.

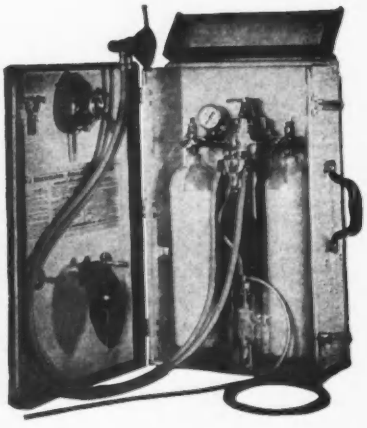
All prices F. O. B. Boston. Orders shipped express collect unless other instructions received; small orders parcel post prepaid. Single copies of all items gratis to N.F.P.A. members and campaign sponsors.

Items Nos. 2, 3, 4, 5, 6, 7, 10(a), (b), (c), (d), (e), have space for imprints of names of campaign sponsors or other local messages added as desired by purchasers. Imprinting done by N.F.P.A. subject to extra charges and delay.

# E & J RESUSCITATORS ARE YEARS AHEAD

★

**E & J Resuscitators were being used by Fire Departments, Industrials and Hospitals TWELVE YEARS before other manufacturers attempted to build automatic breathing machines. Today, E & J equipment incorporates vital advances in design and construction which maintain this record of vision and superiority.**



★

## E & J GIVES YOU TOMORROW'S RESUSCITATOR TODAY

**The same E & J vision, which developed the modern Resuscitator years before other manufacturers entered this field, is keeping E & J Resuscitators of today years ahead in efficiency, reliability, simplicity and safety. That is why so many more E & Js than all other makes and types combined are being purchased by Fire Departments, Industrials, Hospitals, Beaches and First Aid Squads everywhere.**

WE INVITE YOUR THOROUGH INVESTIGATION
OF THE GREAT LIFE SAVING RECORD OF THE
E & J RESUSCITATOR INHALATOR
AND ASPIRATOR.

## E & J MANUFACTURING CO.

GLENDALE, CALIFORNIA

| | | | |
|---|---|---|---|
| Drexel Bldg. | 17 East 42nd St. | 530 Fernando St. | 581 Boylston St. |
| Philadelphia | New York City | Pittsburgh | Boston |
| 2144 No. Springfield | 3032 W. 25th Ave. | 3900 Grandy Ave. | |
| Chicago | Denver | Detroit | |

***Pioneers and Specialists in Mechanical Artificial Respiration***


## GRAIN ELEVATOR FIRE

CHIEF EMMERY A. GREUNKE, of Appleton, Wisconsin, reports this spectacular fire of July 8th.

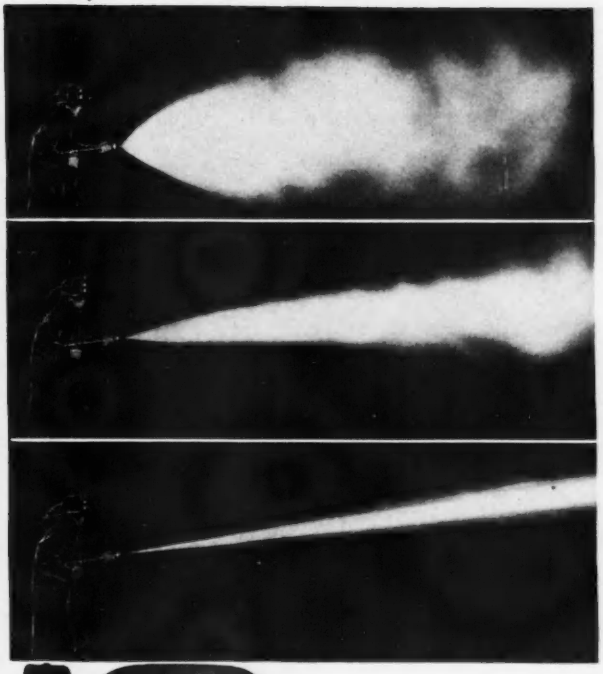
"Four barrels of cod liver oil used in manufacturing animal feed were stored on a rear platform. Also, two barrels of roofing asphalt. Neighbors reported a small pail of asphalt on the platform appeared to be on fire. By the time the call to the fire department was completed the fire had spread up the side walls and involved the entire roof."

The top illustration shows this stage of the fire. The second picture was taken about 15 minutes later. Six explosions occurred, blowing the roof off. One barrel of cod liver oil and one of roofing asphalt exploded which accounted for violent explosions reported by spectators.

"A cigarette could hardly have ignited the asphalt unless it had been thinned with some solvent. Cod liver oil may have been spilled on the platform, and it burns much like kerosene.

"While the fire was spectacular to witness, because it flashed and involved the entire building, it was not a deep-seated fire and could be brought under control quickly. Every part of the building was charred, and the heat was intense enough to ruin all machinery. Fire damage was set at $95,000.

# Specify THE PERFECTED FOG GUN



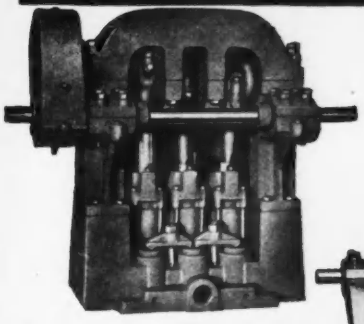
● The Hardie Fog Fire Gun is designed and built especially for the Fog Fire Fighter. It is not merely an adaptation of a nozzle or gun originally designed for other purposes. It produces a true fog—there is no splatter. The water is completely atomized.

Hardie Single Trigger Control opens and closes the gun and selects any type of spray desired. One hand does it all by a slight pressure of the fingers. The atomizing device is simple non-clogging machined brass casting. The gun weighs about 4 pounds. Perfect balance makes it feather-light when the pressure is on.

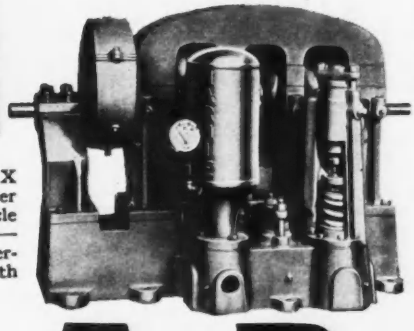
The Hardie Fog Gun permits a wide range of stream selection from a fine steam-like fog to a solid penetrating stream. Intermediate spray, combining fog with a fine driving stream, is obtained by merely changing the position at which the fingers hold the trigger. Thus fog and stream can be used at the same time or quickly and easily alternated as desired. The gun is strongly built of all brass construction except trigger which is made of aluminum. Trouble free operation and long life are assured by simplicity of design and sturdy construction. Easily handles pressures of 500 to 1000 P. S. I. Made only by

**THE HARDIE MFG. COMPANY**

Hudson, Michigan — Los Angeles, California — Portland, Oregon



● Leading manufacturers of Fog Fire Fighters equip their units with Hardie High Pressure Pumps because exclusive Hardie features of pump design and construction bring specific valuable advantages.



● Above—The Hardie XCXX Pump delivering 35 gallons per minute at 118 R. P. M. with nozzle pressure of 500 P. S. I. At right—The Hardie LCXA Pump delivering 60 gallons at 130 R. P. M. with nozzle pressure of 800 P. S. I.

# ★ H ★ A ★ R ★ D ★ I ★ E

## High Pressure PUMPS AND FOG GUNS for Fog Fire Fighters

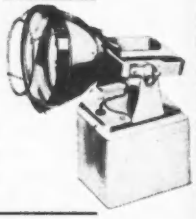
# MASTER★LIGHTS FOR EVERY NEED

**The best in colored oscillating lights for your motor equipment.**

**Type 06** ←
Clears Your Side of Street

**Featherweight, Mile Range, Rechargeable Hand Searchlights and Floodlights.**

**Type WS** →
Uses Small Rechargeable Battery Mile Range

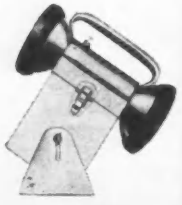


**Type Dul** ←
Emergency Floodlight For Theatres, Road Houses, etc.

**Types F5 and Super-6** →
Dry and Rechargeable Units. ¾ Mile Range

**Type T** ←
Roof mounted Officers Searchlight 360°

**Type T&T** →
Two-Way. Hand and Red Warning Light



**CARPENTER MFG. CO.**
"MASTER ★ LIGHT ★ MAKERS"
168 SIDNEY ST., CAMBRIDGE 39, MASS.

"I guess it's kind of hard to hear with the shower going"

Reamer Keller in *Collier's Weekly*

## MEMBERSHIP REPORT

THE total number of companies in the N.F.P.A. Volunteer Firemen's Section this month is up to 1,083 with 10 new companies joining. This may sound like a very slight gain, but in the usual late summer lag this is a particularly good sign.

Members are urged to point out the advantages of membership in the Volunteer Firemen's Section at all firemen's conventions, fire schools, and fire prevention meetings.

The monthly report on new members is as follows:

Bisbee Fire Department, Bisbee, Ariz.
North Haven Volunteer Fire Company No. 1, North Haven, Conn.
Caterpillars Fireman's Club, Decatur, Ill.
Albany Volunteer Fire Company, Albany, Ind.
Willard Engine & Ladder Company No. 2, South Portland, Maine
Lanesboro Volunteer Firemen's Assn., Lanesboro, Mass.
Hebron Volunteer Fire Department, Hebron, Neb.
Parkston Fire Department, Parkston, Ohio
Pauls Valley Fire Department, Pauls Valley, Okla.
Manoa Fire Company, Manoa, Pa.

### MEMBERSHIP PLAN

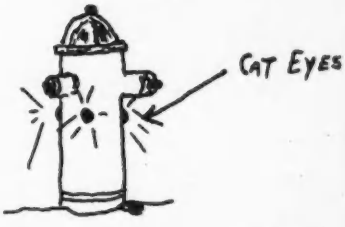
● Through the Volunteer Firemen's Section, fire companies may become members of the National Fire Protection Association. As a member fire company, the department receives at headquarters a set of all regular N.F.P.A. publications. This includes the Quarterly, the monthly News Letter, posters and bulletins.

● Each member fire company has the Volunteer Firemen magazine sent to the homes of ten men at no extra charge beyond the ten dollars annual dues paid by all associate members of the N.F.P.A. All other N.F.P.A. members pay ten dollars without the ten copies of Volunteer Firemen.

● If more than ten firemen want to receive Volunteer Firemen, an additional dollar should be sent for each extra fireman listed to receive the magazine. Individual subscriptions are not accepted from departments not members of the N.F.P.A.

●

## WHERE'S THAT HYDRANT?




ASSISTANT State Fire Marshal, Howard P. Bock, of Charleston, W. Va., sends this suggestion for quickly locating hydrants at night.

"By placing 'cat eyes' [glass reflectors] around your hydrant, which can be done by spotting them on the hydrant or metal band, would help locate obscure hydrants at night by reflection, eliminate overruns and prevent careless drivers from backing or running into them. Five should be sufficient."

# INDIAN Fire Pumps

## Have This Great Advantage

CLEAR water is the cheapest and easiest way to extinguish Class A **inside** and **outside** fires. Any water supply serves for quick filling of the **INDIAN FIRE PUMP'S** big 5-gal. rustproof tank.

A large majority of your calls can be handled with **INDIAN FIRE PUMPS** alone without laying a section of hose. Easy pumping throws 30 to 50-ft. pressure stream or nozzle adjusts to a spray.

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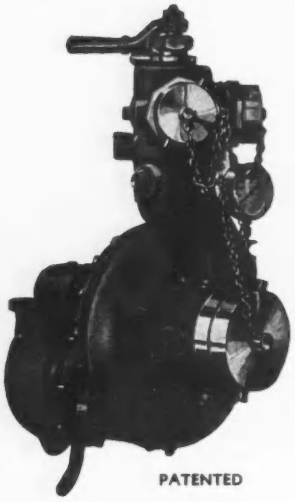
**FIRE APPARATUS CENTRIFUGAL PUMPS**



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***Pumps—and pumps only—since 1873***

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CIRCUL-AIR THE AIR CONDITIONING FIRE HOSE DRYER

**Electrically-operated, the CIRCUL-AIR dries hose in a very few hours — 25 to 50 times faster than a tower or a rack. By prolonging the life of hose now in service and, by quick drying, lessening the need for large hose reserve for "reloads" while wet hose is drying, CIRCUL-AIR helps to build up the Nation's rubber stock pile.**

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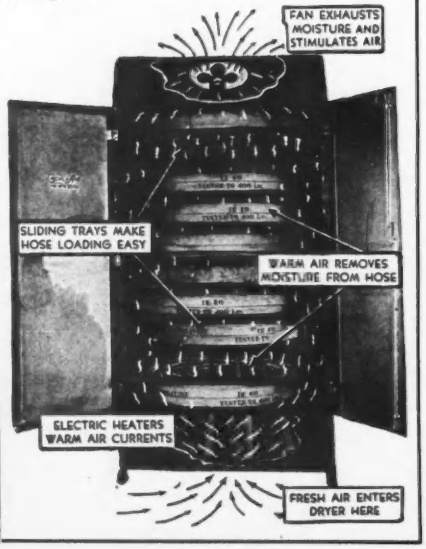
- **Eliminates towers**
- **Is easier to use**
- **Reduces hose stretch**
- **Improves building design**
- **Air-conditions as it dries**
- **Saves space, work, time and critical materials**
- **Saves drying time**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SLIDING TRAYS MAKE HOSE LOADING EASY
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ELECTRIC HEATERS WARM AIR CURRENTS
FRESH AIR ENTERS DRYER HERE

THE CIRCUL-AIR CORPORATION
6339 East Palmer Avenue
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# A-24 BOMBER CRASH

CHIEF J. RAY PENCE, of the Stillwater, Okla., Fire Department reports a bomber crash fire, July 27th, in which the Army pilot and a WAC passenger were killed. The ease with which the firemen extinguished the resulting fire showed the advantage of previous training in handling airplane crash fires. Chief Pence reports special training on crash fire fighting was based upon N.F.P.A. text material.

Firemen were watching as the A-24 "Dauntless" dive bomber went into a roll that brought the plane so near the ground it struck a tree in front of a dwelling and scattered fragments over two city blocks. The gasoline tank, of bullet-proof rubber, landed a block away, badly ruptured. The only recognizable piece of wreckage was a small part of one wing. Firemen were sitting on their rigs ready to head for the scene of the crash the moment it hit.

Gasoline was thrown over the debris of the crash in a 300-foot area. Although fire had not yet occurred, the department immediately flushed the ground with fog nozzles to eliminate any fire hazard. Shortly afterward, a bystander dropped a cigarette near the super-charger, recognized as one of the danger spots in plane crashes. Fire resulted but was easily extinguished because of the precaution taken by the fire department.

The Stillwater Department is well equipped with fog nozzles, and fog was used exclusively on this flammable liquid fire. Fog streams from both booster lines and 1½-inch hose lines were directed over the crash debris and onto the ground to float the gasoline in order that the earth would not become saturated. One large fog nozzle was supplied by a 3-inch line.

Although it was impossible to save the occupants of the wrecked plane, very little property damage was suffered by Stillwater residents in the vicinity of the crash, due to the alertness of the fighters.

●

**HARDIN CO., IOWA, FIREMEN** organized in Iowa Falls, Iowa, on June 24. The fire companies of the county meet once a month to promote more efficient inter-county service. Merle Whitish, of Iowa Falls, was elected president; Ray Wilcox, of Eldorada, Vice-President; Harry Graham, of Iowa Falls, Secretary-treasurer.

●

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**American LaFrance—G.M.C. Type 99, 500 g.p.m. rotary gear, Triple Combination Pumper. Model of 1929. Good condition. Excellent pre-war tires. Apply to**

**CHIEF R. G. SMITH**
**BELMONT FIRE DISTRICT**
**BELMONT, CALIFORNIA**

# What's wrong with this PICTURE?

The sign SAYS "Absolutely Fireproof"...so why are the firemen here? Because unfortunately the owners failed to realize that no building can be more "fireproof" than its contents.

Such oversight costs hundreds of thousands yearly in vital materials destroyed by fire. In many cases, regardless of insurance, these goods cannot be replaced...and too, *intangible* losses—lost prestige, lost confidence, lost profits and a score of other unseen but very real losses...can deal a staggering blow to an erstwhile successful business.

Only when building and contents are protected with automatic devices which detect fire *at its start* and summon fire fighters to the scene in those vital few moments after a blaze breaks out can you or your customers experience peace of mind in a maximum sense of security...only then can you have the assurance that the goods in your care have the best of up-to-date protection.

That is why warehousemen, plant executives and business men the country over fortify their property against belated fire discovery and delayed alarms by adopting A.D.T. Automatic Protection Services... Aero Automatic Fire Alarm, Automatic Sprinkler Supervision, Waterflow Alarm, Watchman Supervision, Industrial Process and Heating System Supervision, Fire Control for Air Duct Systems.

May we tell you how this nationally operated service can help *you* solve your particular protection problems and possibly effect substantial economies as well? Write today...you incur no obligation.

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*Dependable Performance*

There is only one way to win a fire "battle", and that is to have a dependable supply of water, from dependable pumpers—pumpers that arrive safely at the fire. The most effective way to clear traffic—to protect men and equipment—to assure fast and safe arrival—is to equip pumpers, and all other fire-fighting apparatus, with powerful, clear-toned FEDERAL Sirens.

FEDERAL offers a variety of vehicle sirens from which to make a selection—coaster, long roll, and double tone sirens—with or without flashing, or oscillating, red light.

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*Canvas or Rubber Type*

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Illustrated at right is Midwestern's No. 101 Fireman's coat, which is highly serviceable and popular in both Volunteer Departments and the larger municipal departments throughout the country. Flexible elastic inner sleeve for wrist to keep out water, cold and sparks; adjustable collar strap, detachable wool lining, Midwestern Safety snaps, two outside pockets, 6-inch storm flap and many other fine Midwestern qualities. See your local Midwestern distributor for prices and literature, or write the factory.

MIDWESTERN MFG. CO.

MACKINAW, ILLINOIS


# Fire School Notes

**Michigan.** The sixteenth annual Michigan Fire College at the University of Michigan, Ann Arbor, July 11–14. The program was designed especially for small town and volunteer departments. Two advanced courses were introduced, one Industrial Fire Protection led by Harry K. (Smoky) Rogers, Chief Engineer of the Fire Prevention Department, Western Actuarial Bureau, Chicago. The second was Fire Department Inspections conducted by Emmett Cox, Field Officer, Western Actuarial Bureau, Chicago.

**Oklahoma.** The Eleventh Annual Short Course Fire Service Training at Stillwater for three weeks began July 17. George Orgain instructed the Fire Stream session, July 17–22. July 24-29, Officers' Training under Glenn Smith. July 31, Ventilation with Fred Heisler instructing. The training course was sponsored by Oklahoma A. & M. College in cooperation with the state department of trade and industrial education and the Oklahoma State Fireman's Association.

**Texas.** The Fifteenth Annual Firemen's Training School, Texas A. & M., at College Station, May 29. Registration came to 396 students from 274 towns. Speakers during the session were Olin Culberson, secretary of the State Firemen's and Fire Marshal's Association and State Railroad Commissioner; James R. D. Eddy, State Director of Vocational Training; and Eugene Sanders, fire prevention chief of the State Fire Insurance Department of Austin.

•

## NEW FIRE DISTRICT FORMED, CONKLIN, N. Y.

CHIEF E. S. YOUNGS, President of Broome County Fire Chiefs' Association, reports the organization of a new suburban fire district at Conklin, N. Y. The district protects a surburban area covering a radius of about three square miles with around $2,000,000 assessed valuation. It was the largest unprotected district in Broome County previous to the organization of this new department.

The district adjoins the city of Binghampton and runs along the Susquehanna River, a section where there have been floods in the past years.

At a meeting on July 27 about eighty men signed up as members of the company. They expect to build a fire station and obtain equipment as quickly as possible. This is the second new fire company formed in Broome County in the past year. Chenango Forks formed its department a year ago.

The county now has three paid departments and twenty-one volunteer departments all having modern equipment.

# FAMOUS in fire HISTORY

## This Memorable Old Print

Currier and Ives did their best work on this striking study, the "St. Louis Conflagration of 1849." Overshadowed only by the epic '49 Gold Rush the flames and explosions of this catastrophe wrecked the entire waterfront area.

*FREE—A beautiful black and white copy of this print! Ideal for framing. Send coupon today!*

## this modern fire fighter

**It is unconditional surrender for fire when *CD/Fog* goes into action. No other extinguisher packs such a wallop. One moment—a blazing conflagration. Next—a quick application of *CD/Fog*. The fire is out. The fight is finished!**

***CD/Fog*** **is absolutely safe, leaves no stain. Its harmless carbon dioxide swiftly smothers flame by excluding oxygen. Oil, gasoline, electrical, and chemical fires submit without a struggle.**

***CD/Fog*** **is dependable—quality mass produced for essential users by General Detroit, famous for over forty years of fire protection. Coupon below will speed details. Mail it now!**

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*Distributors in all principal cities.*

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**Detroit 7, Michigan**

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**Name**_____

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**Attach this convenient coupon to your letterhead and mail (612)**

# When Life is at Stake

# The EMERSON RESUSCITATOR

**is your best insurance against preventable asphyxial death. Don't take chances. Insist on the best! Let us demonstrate to your department.**

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**J. H. EMERSON CO.**
**24 Cottage Park Ave., Cambridge, Mass.**
Representatives in Principal Cities


## MANUFACTURERS' ANNOUNCEMENTS

EARLY in 1943 Chief J. S. DeGraves, of the Vancouver, B. C. Fire Department, suggested that the type of boat known as a landing barge had possible uses as a fire float, on which land apparatus could be driven and used from the water side of piers and shipyards.

As a result, the Dominion Government is now having constructed three such barges, with alterations from the original to conform to requirements of modern fire-fighting. They are propelled by two 125-

hp. Gray motors each driving a separate propeller and controlled from a wheelhouse situated amidship, giving the helmsman clear vision controlling both the helm and the two engines. Three Bickle-Seagrave ARP pumpers deliver 1,200 gallons a minute through six individual hose lines on each boat. Regardless of tidal changes this type fire boat can be brought close inshore because of its shallow draft, and the ramp will act as a fire screen.

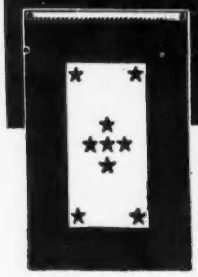
•

AN attractive mid-year fire safety calendar, featuring two striking views of the great San Francisco fire, is issued by THE GENERAL DETROIT CORPORATION, producers of fire extinguishers and other equipment for fire fighting, safety, plant protection, and industrial maintenance.

Of practical wall size for easy reading, the calendar is in two colors, with maximum display given to the San Francisco photographs. One picture is a wide panorama view of the city while the fire was at its height. Flames have spread over the entire area and the sky is black with dense smoke. The other picture, taken after the fire had died down, shows the same scene in smoldering ashes and complete ruin. It offers remarkable portrayal of the terrible havoc wrought by this disaster.

The lower section of the calendar consisted of thirteen calendar pages printed in large numerals and covering the year through June, 1945. Copies of the mid-year fire safety calendar may be secured free of charge by writing The General Detroit Corp., 2200 East Jefferson Ave., Detroit 7, Mich.


# HONOR YOUR SERVICE MEN



Honor your fellow-firemen now serving with the armed forces, by displaying this official

**SERVICE FLAG**

*Blue stars, white panel, field of red. Send for catalogue.*

One star for each one in service. Available in any size or material desired. Send for Free illustrated catalogue and price list today.

*Permanent*
**ROLL of HONOR**

A permanent plaque, with individual names in silver on gold-bordered permanent name plates. Beautiful walnut plaque with eagle and victory torches. Write for price list today.

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**Dept. 82, Rock Island, Ill.**


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### Fight Fires the Modern Way with FMC High-Pressure Fog

You get action — *fast* — with the FMC High-Pressure Fog Fire Fighter.

And here's why! The high pressure gives you a combination of finely-atomized water and high velocity (adjustable to lesser velocity when required)—just what you need to *blast, cool* and *smother* flame.

This has been proven at thousands of fires. Residence, barn and basement fires, as well as grass and forest fires.

But remember: *it's the pressure that counts!* And only the FMC High-Pressure Fog Fire Fighter packs the needed punch to produce and maintain 800 lbs. pump pressure—more than 600 lbs. nozzle pressure, and yet not dangerous because of this pressure.

Investigate! Get the facts about this new and revolutionary fire fighting technique. Right now—the Armed Forces are taking most of the production of FMC High-Pressure Fog Fire Fighters. But—you should be ready to modernize the moment civilian needs can be met. Start planning—*now!*

**STANDARD FMC FOG FIRE FIGHTER.** *A self-contained fire-fighting unit. Carries its own water supply and complete fire-fighting equipment. Provides two guns of 30 gallons each at 600 lbs. nozzle pressure.*

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16 YEARS EXPERIENCE

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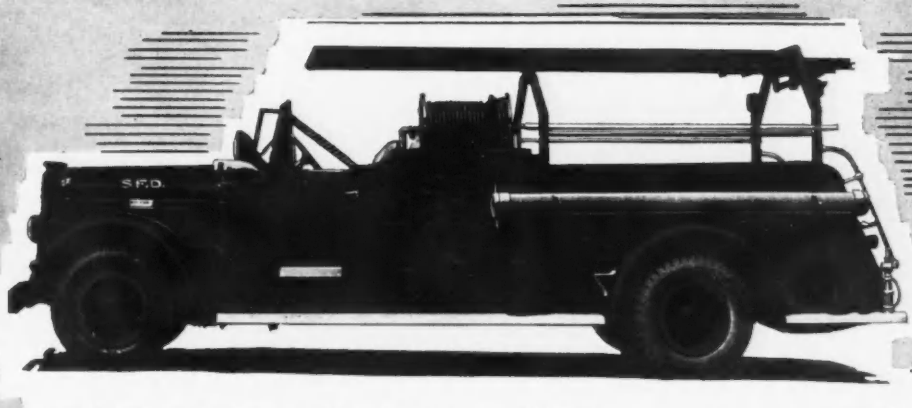
# AKRON BRASS

FIRE FIGHTING EQUIPMENT

# SPECIFIED by Springfield

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### ABOUT STANDARD MODEL 120T

Overall length: 25 ft.
Weight: 15,300 lbs.
Cylinders: 6
Wheelbase: 185 in.
Turning Radius: 35 ft.
Horsepower: 200
Pump: 1000 to 1250 G.P.M. two-stage centrifugal
Booster Hose: Capacity — 450 ft. of ¾ in. hose, 300 ft. of 1 in. hose
Booster Tank: 250-350 gals.

***MODIFICATIONS FOR SPRINGFIELD, MASS.***

Special Springfield body, with lengthwise seats (storage space in seats).

Overhead ladder mounting.

Pressure gages installed for each discharge gage. Discharge gates provided with locks to prevent movement. Pump Suctions equipped with Siamese 2½ in. connections for city work, with larger connections for occasional drafting operations.

Booster Tank, 100 gals. Independent 100 g. p. m. booster pump driven from transmission power take-off.

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In body construction, equipment, and performance characteristics, this Ward LaFrance Triple Combination Pumper is engineered precisely for the needs of the Springfield, Massachusetts Fire Department Yet, it is the same basic model also recently delivered to Pittsburgh, Pennsylvania and Duluth, Minnesota. Result: custom-built efficiency, with realistic manufacturing economy, which prompted Springfield to reorder within a matter of weeks after delivery of the apparatus.

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